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EXAMINER

KAO, CHIH CHENG G

ART UNIT PAPER NUMBER

2882

DATE MAILED: 05/09/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,824

Applicant(s)

WILSON ET AL.

Examiner

Chih-Cheng Glen Kao

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 2-12, 14-28 and 34-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2-12 and 37 is/are allowed.
- 6) ☒ Claim(s) 14-28 and 34-36 is/are rejected.
- 7) ☒ Claim(s) 20 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 08 September 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- ☐ Interview Summary (PTO-413) Paper No(s). _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 20 is objected to because of the following informalities: In line 14, "coating at least one face of the substrate within an opacifying layer" is recited. The word "within" seems to be the wrong preposition. This objection may be obviated by replacing "within" with - -with- -. Appropriate correction is required.

2. Claim 22 is objected to because of the following informalities: In line 2, "the foil" is recited. This appears to be a minor draft error with lack of antecedent basis problems. This objection may be obviated by replacing "the" with - -a- -. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 14-17, 19-24, 26, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al. (US Patent 5449200) in view of Jackson (WO 94/29119) and Solomon et al. (US Patent 4536016).

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4. With regards to claim 14, Andric et al. discloses a security document (title) a first at least partially transparent portion (fig. 1, #16), an optical element within or superposed (fig. 1, #44) with the partially transparent portion, and an opacifying portion for impingement (fig. 1, #20).

However, Andric et al. does not disclose an optical projection element to transform a light beam passing from a source into a patterned beam of selected design.

Jackson teaches an optical projection element to transform a light beam passing from a source (Fig. 4a and 4b). Solomon et al. teaches an optical projection element passing a patterned beam of selected design (col. 2, lines 25-35).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the optical projection element of Jackson with the device of Andric et al, since the optical elements of Jackson and Andric et al. are considered art-recognized equivalents in that they are both security elements used for documents. It would have been within routine skill in the art to substitute one for the other. Secondly, one would be motivated to use the optical element of Jackson for producing an optically variable effect for increase security as implied from Jackson (Page 1, 6th paragraph).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the optical projection element of Solomon et al. with the device of Andric et al, since the optical elements of Solomon et al. and Andric et al. are considered art-recognized equivalents in that they are both security elements used for documents. It would have been within routine skill in the art to substitute one for the other. Secondly, one would be motivated to use the optical element of Solomon et al. for security in documents as implied from Solomon et al. (col. 2, lines 25-35).

5. With regards to claim 15, Andric et al. further discloses the opacifying portion (Fig. 1, #20) and at least partially transparent portion (Fig. 1, #16) as being remote from each other.

6. With regards to claim 16, Andric et al. in view of Jackson and Solomon et al. suggests a device as recited above.

However, Andric et al. does not specifically disclose the patterned beam as diffraction light passing through the document.

Solomon et al. further teaches the patterned beam as diffraction light passing through the document (col. 2, lines 25-35).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the optical projection element of Solomon et al. with the device of Andric et al, since the optical elements of Solomon et al. and Andric et al. are considered art-recognized equivalents in that they are both security elements used for documents. It would have been within routine skill in the art to substitute one for the other. Secondly, one would be motivated to use the optical element of diffraction for security in documents as implied from Solomon et al. (col. 2, lines 25-35).

7. With regards to claim 17, Andric et al. in view of Jackson and Solomon et al. suggests a device as recited above.

However, Andric et al. does not disclose an opacifying layer applied to a face to leave an uncoated area on the surface.

Jackson teaches an opacifying layer applied to a face to leave an uncoated area on the surface (Page 10, lines 1-10).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the opacifying layer of Jackson with the suggested device of Andric et al. in view of Jackson and Solomon et al., since one would be motivated to have an opacifying layer for indicia to mark what kind of security document or value it has as implied from Jackson (Page 10, lines 1-10).

8. With regards to claim 19, Andric et al. further discloses the opacifying portion with an optical device applied to the opacifying portion (Fig. 1, #20) interacting with the patterned beam to create a visual security effect (Fig. 1).

9. With regards to claim 20, Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose forming an at least partially transparent substrate having first and second opposing surfaces, coating the substrate with an opacifying layer to leave a first uncoated area, conveying the projection elements into position, and transferring it onto the substrate.

Jackson teaches forming an at least partially transparent substrate having first and second opposing surfaces and coating the substrate with an opacifying layer to leave a first uncoated area (Page 10, lines 1-10). Solomon et al. teaches conveying the projection element into position and transferring it onto the substrate (col. 2, lines 5-20).

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It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the substrate and uncoated area of Jackson with the method of Andric et al, since one would be motivated to use it to place a security element as implied from Jackson (Page 10, lines 1-10).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have convey and transfer the projection element of Solomon et al. with the suggested device of Andric et al. in view of Jackson and Solomon et al., since one would be motivated to use this method to place a security element on the document as implied from Solomon et al. (col. 2, lines 5-20).

10. With regards to claim 21, Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose conveying the element on a transfer foil.

Solomon et al. teaches conveying the element on a transfer foil (col. 4, lines 45-55).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have convey by transfer foil of Solomon et al. with the suggested method of Andric et al. in view of Jackson, and Solomon et al., since one would be motivated to use it to more precisely align the components as implied from Solomon et al. (col. 4, lines 27-40).

11. With regards to claim 22 Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose transferring by hot stamping.

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Solomon et al. teaches transferring by hot stamping (col. 4, lines 27-35).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have hot stamp of Solomon et al. with the suggested method of Andric et al. in view of Jackson, and Solomon et al., since one would be motivated to use it to more precisely align the components and for faster manufacturing as implied from Solomon et al. (col. 4, lines 27-40).

12. With regards to claim 23 Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose an optically variable device conveyed together with the optical projection element.

Solomon et al. teaches an optically variable device conveyed together with the optical projection element (col. 2, lines 25-35).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the variable device and projection element of Solomon et al. with the suggested method of Andric et al. in view of Jackson, and Solomon et al., since one would be motivated to use it for a security element in documents as implied from Solomon et al. (col. 2, lines 25-35).

13. With regards to claim 24 Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose embossing.

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Jackson further teaches embossing (Page 1, last paragraph).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have embossing of Jackson with the suggested method of Andric et al. in view of Jackson, and Solomon et al., since one would be motivated to use it for more easily forming a security device on a document as implied from Jackson (Page 1).

14. With regards to claims 26 and 27, Andric et al. further teaches applying an optical image by printing (Abstract) to an opacifying portion (col. 7, lines 5-15).

15. Claims 18, 25, and 34-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al. in view of Jackson and Solomon et al. as respectively applied to claim 20 above, and D'Amato (US Patent 5393099).

16. With regards to claims 18 and 34, for purposes of being concise, Andric et al. in view of Jackson and Solomon et al. suggests a device as recited above.

However, Andric et al. does not disclose a second at least partially transparent portion or screen having a window for transmitting light acting as a pseudo point light source or substantially collimated light.

D'Amato teaches a second at least partially transparent portion or screen having a window for transmitting light acting as a pseudo point light source or substantially collimated light (Fig. 2, #7).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the second transparent portion of D'Amato with the suggested device and method of Andric et al. in view of Jackson and Solomon et al., since one would be motivated to have the second portion in order to see the optical device as implied from D'Amato (col. 3, lines 15-20).

17. With regards to claim 25, for purposes of being concise, Andric et al. in view of Jackson and Solomon et al. suggests a device as recited above.

However, Andric et al. does not disclose a second uncoated area acting as a pseudo point light source to pass light.

D'Amato teaches a second uncoated area acting as a pseudo point light source to pass light (Fig. 2, #7).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the uncoated layer as a pseudo point light source of D'Amato with the suggested device and method of Andric et al. in view of Jackson and Solomon et al., since one would be motivated to have the second portion in order to see the optical device as implied from D'Amato (col. 3, lines 15-20).

18. With regards to claim 35, Andric et al. in view of Jackson, Solomon et al., and D'Amato suggests a method as recited above.

However, Andric et al. does not disclose the window as part of the security document.

D'Amato teaches the window as part of the security document (Fig. 2, #7).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the window as part of the security document of D'Amato with the suggested device and method of Andric et al. in view of Jackson, Solomon et al., and D'Amato, since one would be motivated to have it to see the optical device as implied from D'Amato (col. 3, lines 15-20).

19. With regards to claim 36, Andric et al. in view of Jackson, Solomon et al., and D'Amato suggests a method as recited above.

However, Andric et al. does not disclose the first and second transparent remote to conveniently place the window between the source and optical element.

D'Amato teaches the first and second transparent remote to conveniently place the window between the source and optical element (Fig. 2, #7 and 5).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to the first and second transparent remote to conveniently place the window between the source and optical element of D'Amato with the suggested device and method of Andric et al. in view of Jackson, Solomon et al., and D'Amato, since one would be motivated to have this arrangement to conveniently keep parts together as implied from D'Amato (col. 3, lines 8-20).

20. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Andric et al. in view of Jackson and Solomon et al. as respectively applied to claim 26 above and further in view of Benoit et al. (US Patent 6270610) and Howland et al. (WO 97/47478).

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Andric et al. in view of Jackson and Solomon et al. suggests a method as recited above.

However, Andric et al. does not disclose an optical image or device as a reflective foil OVD or like device.

Benoit et al. teaches an optical image or device as a reflective foil OVD (col. 1, lines 40-45). Howland et al. teaches a like device (Page 15, lines 5-13).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have the OVD of Benoit et al. with the suggested method of Andric et al. in view of Jackson and Solomon et al., since one would be motivated to have it for more security in documents as implied from Benoit et al. (col. 1, lines 35-45).

It would have been obvious, to one having ordinary skill in the art at the time the invention was made, to have a like device of Howland et al. with the suggested method of Andric et al. in view of Jackson, Solomon et al. and Benoit et al., since one would be motivated to have it to put indicia for marking a document as implied from Howland et al. (Page 15, lines 5-13).

Allowable Subject Matter

21. Claims 2-12 and 37 are allowed.

The following is an examiner's statement of reasons for allowance:

With regards to claim 2, prior art does not disclose or fairly suggest a method of verifying the authenticity of a security document including the step of folding the security document such that the patterned bema is caused to impinge upon the opacifying portion which thus acts as the viewing surface in combination with all the limitations in the claim.

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With regards to claim 9, prior art does not disclose or fairly suggest a method of verifying the authenticity of a security document including the step of folding the security document such that part only of the light beam from the light beam source passes through the second at least partially transparent portion before being transmitted through said first at least partially transparent portion, said second at least partially transparent portion thus acting as a pseudo point light source in combination with all the limitations in the claim.

With regards to claim 37, prior art does not disclose or fairly suggest security document including the security document being foldable such that the second at least partially transparent portion is able to be placed between the light beam source and the projection element in order that the light beam from the light beam source passing through the second at least partially transparent portion is substantially collimated light in combination with all the limitations in the claim.

Response to Amendment

22. Finality has been withdrawn in light of newly discovered references. The indicated allowability of claims 14, 15, 17-28, and 34-36 are withdrawn in view of the newly discovered reference(s) to Andric et al. and Solomon et al. Rejections based on the newly cited reference(s) are as recited above.

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Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (703) 605-5298. The examiner can normally be reached on M - Th (8 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Kim can be reached on (703) 305-3492. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9318 for regular communications and 703-872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



gk
May 6, 2003



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